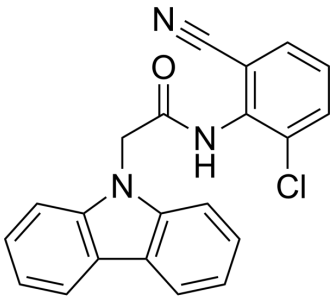
KL044

Cat. No.:	HY-119506
CAS No.:	1801856-93-8
Molecular Formula:	$C_{21}H_{14}ClN_3O$
Molecular Weight:	359.81
Target:	Cryptochrome
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (277.92 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.7792 mL	13.8962 mL	27.7924 mL
	5 mM	0.5558 mL	2.7792 mL	5.5585 mL
	10 mM	0.2779 mL	1.3896 mL	2.7792 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.95 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

KL044, a stabilizer of the clock protein cryptochrome (CRY) , is a potent chemical probe with a pEC_{50} value of 7.32, leading to the extension of the circadian period and repression of Per2 activity[1].

IC_{50} & Target

pEC50: 7.32[1]

In Vitro

KL044 (0-3.7 μM; 8 h) effectively stabilizes the CRY1-LUC fusion protein without affecting the stability of LUC in the HEK293 stable cell line[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Jae Wook Lee, et al. Development of Small-Molecule Cryptochrome Stabilizer Derivatives as Modulators of the Circadian Clock. ChemMedChem. 2015 Sep;10(9):1489-97.

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